

Applying lifeguard patient assessment/response skills in a possible Covid-19 environment?

Introduction

There has been a lot of work behind the scenes at SLSNZ to interpret and provide advice regarding COVID-19, we felt this one was also well worth sharing. One of our experienced members **Emma Sutherland** (Club Chair – Pacific SLSC and Intensive Care Paramedic based in Hawkes Bay) and **Gary Payinda** (Medical Director, Surf Life Saving NZ) opened up some dialogue about how lifeguards should approach a patient assessment in a COVID-19 environment.

Question: *What is currently the risk of someone drowning and needing CPR being Covid-19 positive?*

Answer/s:

- Community prevalence is very low, people at the beach involved in collapses or drownings are very unlikely to have COVID-19 at this time.
- The highest risk of COVID-19 being passed to a rescuer appears to be from people with the highest viral loads, i.e. elderly, febrile patients with severe respiratory distress, who are very unlikely to be going in the beach and being in the water.
- Treating all beachgoers as COVID-19 positive isn't proportionate with the risk at this point, specifically because drowning resuscitation requires restoration of breathing without delay. But this still means taking normal precautions of wearing gloves and using a face shield if doing ventilations.

Question: *What are the factors lifeguards need to consider before starting CPR?*

Answer/s:

- The decision to risk resuscitation must always be an individual safety determination. Not just for COVID-19, but for in-water rescues, cliff-rescues, side-of-the-motorway rescues. Rescuer safety needs to be assessed 'by the rescuer'. It's the first letter in DR^SABCD for good reason.
- The risk versus benefit will vary according to different scenarios. There will be situations where the benefit to the patient is very high and the risk to the rescuer is very low, for example a lifeguard providing CPR to a person within their bubble, or to a child who has drowned.
- A young, healthy teenage lifeguard is much less likely to be at risk to Covid-19 than an elderly or immunocompromised rescuer. There is much less risk if the scenario was a young surfer collapsing at the beach than an elderly patient in an aged care facility, with chronic illness and an acute and severe respiratory illness for days.
- For the best results from CPR, it requires ventilation as well as compressions. Unless the risks are high, the benefits of ventilation typically outweigh the risks.
- A simple way of thinking about it is:
 - **GREEN:** Healthy and willing rescuer AND low community prevalence of COVID, AND drowned or paediatric patient: Attempt CPR including ventilations, using barrier device preferably.
 - **ALL OTHERS:** Consider avoiding ventilations and consider alternatives, such as compression-only CPR, having another rescuer take over, or AED-use only, etc.

Question: *What is the safest way to perform CPR?*

Answer/s:

- Ventilation may occur via a bag-valve-mask device, but it could also be a lifeguard applying mouth-to-mouth or mouth-to-face shield. Combine with chest compressions for the best results.
- To lower the risk, compression-only CPR can be undertaken, covering the patients face with a mask, towel, cloth or piece of clothing to prevent chest compressions producing aerosolised droplets.
- To reduce the risk further, instead of chest compressions place AED pads on a patient's chest – this is extremely low risk to the rescuer, and highly recommended.

Question: *Is it OK if members do not want to perform mouth to mouth and/or resuscitation?*

Answer:

- Yes, absolutely. Instead call for bystander help and dial 111.

Question: *What if I come across someone having a heart attack in the street?*

Answer:

- Unfortunately, people are not stopping having heart attacks just because of Covid-19. Adults with sudden cardiac arrest (usually from a sudden heart attack causing a sudden dangerous heart rhythm) are very save-able. These patients need an AED to be applied. Some will avoid death with just a simple shock. Placing AED pads on a patient's chest is extremely low risk to the rescuer, and highly recommended.
- If you don't have an AED, then the best option is to perform chest compressions (to prolong survival until an AED arrives).

Question: *What steps should be taken after being involved in a rescue or resuscitation, regardless of the CPR method used?*

Answer:

- This is a great reminder, SLSNZ needs to disseminate its [Health and Safety protocol](#) for anyone who might have been contaminated:
 - Involving guidance on cleaning, physical isolation, medical support, mental health support, peer support. This would apply to anyone whether they've resuscitated a person, or been spat on, sprayed with chemicals, or otherwise exposed, with specific info regarding COVID best practices.

Thanks to:

Gary Payinda, MD DDU FACEM
Emergency Medicine Specialist, Whangarei Hospital
PHRM Doctor, Auckland Rescue Helicopter Trust
Medical Director, Surf Life Saving NZ

Emma Sutherland,
Club Chair – Pacific Surf Lifesaving Club
Intensive Care Paramedic